

METHOD FOR FORMING A DIELECTRIC LAYER AND SEMICONDUCTOR DEVICE
INCORPORATING THE SAME

FIELD OF THE INVENTION

5 The present invention relates to the field of semiconductors and, more particularly, to an improved dielectric for increasing semiconductor performance.

CROSS-REFERENCES TO RELATED APPLICATIONS

10 This application is related to commonly assigned U.S. Patent Application Serial Nos.: 09/653,639, METHOD FOR FORMING A BARRIER
15 LAYER TO INCREASE SEMICONDUCTOR DEVICE PERFORMANCE, filed August 31, 2000, by Powell et al. and 09/653,298, METHOD FOR FORMING A
20 DIELECTRIC LAYER AT A LOW TEMPERATURE, filed August 31, 2000, by Mercaldi et al., the disclosures of which are incorporated herein
25 by reference. This application is a divisional of U.S. Patent Application Serial No. 09/653,096, filed August 31, 2000, *now Patent*
30 No. 6,576,964.

BACKGROUND OF THE INVENTION

20 There is a constant demand for semiconductor devices of a reduced size. The performance characteristics of semiconductor capacitors, transistors, electrode layers and the like become more critical as device size decreases. Accordingly, processes